

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

SEP 1 9 2017

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Timothy Albert, Plant Manager ALTIVIA Petrochemicals, LLC 1019 Haverhill-Ohio Furnace Road Haverhill, Ohio 45636

Re: Finding of Violation

ALTIVIA Petrochemicals, LLC

Haverhill, Ohio

Dear Mr. Albert:

The U.S. Environmental Protection Agency is issuing the enclosed Finding of Violation (FOV) to ALTIVIA Petrochemicals, LLC (you) under Section 113(a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(3). We find that you are violating your Title V permit and the National Emission Standards for Organic Hazardous Air Pollutants (NESHAP) for the Synthetic Organic Chemical Manufacturing Industry (SOCMI) at 40 C.F.R. Part 63, Subparts F, G, and H at your Haverhill, Ohio facility.

Section 113 of the Clean Air Act gives us several enforcement options. These options include issuing an administrative compliance order, issuing an administrative penalty order and bringing a judicial civil or criminal action.

We are offering you an opportunity to confer with us about the violations alleged in the FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply and the steps you will take to prevent future violations. In addition, in order to make the conference more productive, we encourage you to submit to us information responsive to the FOV prior to the conference date.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Victoria Nelson. You may call her at (312) 886-9481 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

Edward Nam

Director

Air and Radiation Division

cc:

Bob Hodanbosi, Air Pollution Control Division Chief Ohio Environmental Protection Agency

Cindy Charles, Director Portsmouth City Health Department Air Division

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

| IN THE MATTER OF: |) | |
|-----------------------------|----------|----------------------|
| | .) | |
| ALTIVIA Petrochemicals, LLC |) | FINDING OF VIOLATION |
| Haverhill, Ohio |) | |
| · |) | EPA-5-17-OH-15 |
| Proceedings Pursuant to |) | |
| the Clean Air Act, |) | |
| 42 U.S.C. §§ 7401 et seq. |) | |
| • | <u> </u> | |

FINDING OF VIOLATION

The U.S. Environmental Protection Agency finds that ALTIVIA Petrochemicals, LLC (ALTIVIA or Facility) is violating Section 112 of the Clean Air Act (CAA or Act), 42 U.S.C. § 7412. Specifically, ALTIVIA is violating the National Emission Standards for Organic Hazardous Air Pollutants (NESHAP) for the Synthetic Organic Chemical Manufacturing Industry (SOCMI) at 40 C.F.R. Part 63, Subparts F, G, and H as follows:

Regulatory Authority

National Emission Standards for Hazardous Air Pollutants

- 1. Section 112 of the Act, 42 U.S.C. § 7412, requires the EPA to promulgate a list of all categories and subcategories of new and existing "major sources" and "area sources" of hazardous air pollutants (HAP) and establish emissions standards for the categories and subcategories. These emission standards are known as the NESHAP. The EPA codified these standards at 40 C.F.R. Parts 61 and 63.
- 2. "Major source" is defined as "any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants." 42 U.S.C. § 7412(a)(1).
- 3. "Stationary source" is defined as "any building, structure, facility, or installation, which emits or may emit any air pollutant." 42 U.S.C. § 7411(a)(3).
- 4. "Hazardous air pollutant" is defined as "any air pollutant listed pursuant to" Section 112(b) of the Act. 42 U.S.C. § 7412(a)(6).
- 5. Section 112(i)(3) of the Act, 42 U.S.C. § 7412(i)(3), prohibits any person subject to a NESHAP from operating a source in violation of a NESHAP after its effective date. See also 40 C.F.R. §§ 61.05 and 63.4.

- 6. The NESHAP, at 40 C.F.R. Part 63, Subpart A, contains general provisions applicable to the owner or operator of any stationary source that contains an affected facility subject to the NESHAP at Part 63. These include definitions at 40 C.F.R. § 63.2.
- 7. The NESHAP, at 40 C.F.R. § 63.2, defines "existing source" as any affected source that is not a new source.
- 8. The NESHAP, at 40 C.F.R. § 63.2, defines "new source" any affected source the construction or reconstruction of which is commenced after EPA first proposes a relevant emission standard under 40 C.F.R. Part 63 establishing an emission standard applicable to such source.
- 9. On April 22, 1994, EPA promulgated the following NESHAPs, referenced collectively as the Hazardous Organic NESHAP or HON:
 - a. The NESHAP for SOCMI at 40 C.F.R. Part 63, Subpart F (HON Subpart F). See 59 Fed. Reg. 19454;
 - b. The NESHAP for SOCMI for Process Vents, Storage Vessels, Transfer Operations, and Wastewater at 40 C.F.R. Part 63, Subpart G (HON Subpart G). See 59 Fed. Reg. 19468; and
 - c. The NESHAP for SOCMI for Equipment Leaks at 40 C.F.R. Part 63, Subpart H (HON Subpart H). See 59 Fed. Reg. 19568.

The HON Subpart F

- 10. 40 C.F.R. § 63.100(a) of the HON Subpart F provides applicability provisions, definitions, and other general provisions that are applicable to the HON Subparts G and H.
- 11. The HON Subpart F states at 40 C.F.R. § 63.100(b) that the HON Subparts F, G, and H apply to chemical manufacturing process units that, among other things, (1) manufacture as a primary product one or more of the chemicals listed in Table 1 of the HON Subpart F; (2) use as a reactant or manufacture as a product, or co-product, one or more of the organic HAP listed in Table 2 of the HON Subpart F; and (3) are located at a plant site that is a major source as defined in section 112(a) of the Act.
- 12. A "chemical manufacturing process unit" (CMPU) is defined as the equipment assembled and connected by pipes or ducts to process raw materials and to manufacture an intended product. A CMPU consists of more than one unit operation. For the purpose of the HON, CMPU includes, among other things, air oxidation reactors and their associated product separators and recovery devices; reactors and their associated product separators and recovery devices; distillation units and their associated distillate receivers and recovery devices; and any feed, intermediate and product storage vessels, product transfer racks, and connected ducts and piping. A CMPU includes pumps, connectors, instrumentation systems, and control devices or systems. A CMPU is identified by its primary product. 40 C.F.R. § 63.101(b).

- 13. An "equipment leak" is defined as emissions of organic hazardous air pollutants (HAP) from a connector, pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, surge control vessel, bottoms receiver, or instrumentation system in organic HAP service as defined in 40 C.F.R. § 63.161. 40 C.F.R. § 63.101(b).
- 14. "Wastewater" means water that contains either an annual average concentration of Table 9 compounds (defined in the HON Subpart G at 40 C.F.R. § 63.111) of at least 5 parts per million (ppm) by weight and has an annual average flow rate of 0.02 liter per minute or greater; or an annual average concentration of Table 9 compounds of at least 10,000 ppm by weight at any flow rate; and that is discarded from a CMPU. Wastewater is process wastewater or maintenance wastewater. 40 C.F.R. § 63.101(b).
- 15. 40 C.F.R. § 62.102(a) states that owners and operators of sources subject to this the HON Subpart F shall comply with the requirements of Subparts G and H of the NESHAP.
- 16. 40 C.F.R. § 63.102(a)(4) provides that during start-ups, shutdowns, and malfunctions when the requirements of this Subpart F, Subparts G and/or H of this part do not apply pursuant to paragraphs (a)(1) through (a)(3) of 40 C.F.R. § 63.102, the owner or operator shall implement, to the extent reasonably available, measures to prevent or minimize excess emissions to the extent practical.
- 17. 40 C.F.R. § 63.107(a) provides that the owner or operator shall use the criteria specified in this 40 C.F.R. § 63.107 to determine whether there are any process vents associated with an air oxidation reactor, distillation unit, or reactor that is in a source subject to the HON. A process vent is the point of discharge to the atmosphere (or the point of entry into a control device, if any) of a gas stream if the gas stream has the characteristics specified in paragraphs (b) through (h) of 40 C.F.R. § 63.107, or meets the criteria specified in 40 C.F.R. § 63.107(i).
- 18. The criteria at 40 C.F.R. § 63.107(b) through (h) to determine whether a process vent is subject to the HON are as follows: some, or all, of the gas stream originates as a continuous flow from an air oxidation reactor, distillation unit, or reactor during operation of the CMPU (40 C.F.R. § 63.107(b)); the discharge to the atmosphere (with or without passing through a control device) meets at least one of the conditions specified in paragraphs (c)(1) through (3) (40 C.F.R. § 63.107(c), described below in paragraph 19); the gas stream contains greater than 0.005 weight percent total organic HAP at the point of discharge to the atmosphere (or at the point of entry into a control device, if any) (40 C.F.R. § 63.107(d)); the air oxidation reactor, distillation unit, or reactor is part of a CMPU that meets the criteria of 40 C.F.R. § 63.100(b) (40 C.F.R. § 63.107(e)); the gas stream is in the gas phase from the point of origin at the air oxidation reactor, distillation unit, or reactor to the point of discharge to the atmosphere (or to the point of entry into a control device, if any) (40 C.F.R. § 63.107(f)); the gas stream is discharged to the atmosphere either on-site, off-site, or both (40 C.F.R. § 63. 107(g)); and the gas stream is not any of the items identified in paragraphs (h)(1) through (9) (40 C.F.R. § 63.107(h), described below in paragraph 20).
- 19. 40 C.F.R. § 63.107(c)(1) through (3) state that the discharge from the atmosphere (1) is directly from an oxidation reactor, distillation unit, or reactor; or (2) is from an air

oxidation reactor, distillation unit, or reactor after passing solely (i.e. without passing through any other unit operation for a process purpose) through one or more recovery devices within the CMPU; or (3) is from a device recovering only mechanical energy from a gas stream that comes either directly from an air oxidation reactor, distillation unit, or reactor, or from an air oxidation reactor, distillation unit, or reactor after passing solely (i.e., without passing through any other unit operation for a process purpose) through one or more recovery devices within the chemical manufacturing process unit.

- 20. The items identified in 40 C.F.R. § 63.107(h)(1) through (9) are as follows: (1) a relief valve discharge; (2) a leak from equipment subject to the HON Subpart H; (3) a gas stream going to a fuel gas system as defined in 40 C.F.R. § 63.101; (4) a gas stream exiting a control device used to comply with 40 C.F.R. § 63.113; (5) a gas stream transferred to other processes (on-site or off-site) for reaction or other use in another process (i.e., for chemical value as a product, isolated intermediate, byproduct, or coproduct, or for heat value); (6) a gas stream transferred for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse; (7) a storage vessel vent or transfer operation vent subject to 40 C.F.R. §§ 63.119 or 63.126; (8) a vent from a waste management unit subject to 40 C.F.R. §§ 63.132 through 63.137; and (9) a gas stream exiting an analyzer.
- 21. 40 C.F.R. § 63.107(i) states the gas stream would meet the characteristics specified in 40 C.F.R. § 63.107(b) through (g), but, for purposes of avoiding applicability, has been deliberately interrupted, temporarily liquefied, routed through any item of equipment for no process purpose, or disposed of in a flare that does not meet the criteria in 40 C.F.R. § 63.11(b), or an incinerator that does not reduce emissions of organic HAP by 98 percent or to a concentration of 20 ppm by volume, whichever is less stringent.
- 22. Phenol (CAS No. 108952) is listed in Table 1 of the HON Subpart F as a Group III chemical.
- 23. Cumene (CAS No. 98828) and phenol are listed in Table 2 of the HON Subpart F as organic HAP.

The HON Subpart G

- 24. A "Group 1 process vent" is defined as a process vent for which the vent stream flow rate is greater than or equal to 0.005 standard cubic meter per minute, the total organic HAP concentration is greater than or equal to 50 ppm by volume, and the total resource effectiveness index value, calculated according to 40 C.F.R. § 63.115, is less than or equal to 1.0. 40 C.F.R. § 63.111.
- 25. A "Group 2 process vent" is defined as a process vent for which the vent stream flow rate is less than 0.005 standard cubic meter per minute, the total organic HAP concentration is less than 50 ppm by volume, or the total resource effectiveness index value, calculated according to 40 C.F.R. § 63.115, is greater than 1.0. 40 C.F.R. § 63.111.
- 26. A "recovery device" is defined as an individual unit of equipment capable of and normally used for the purpose of recovering chemicals for fuel value, use, reuse or for sale for fuel value, use, or reuse. Examples of equipment that may be recovery devices includes

absorbers, carbon adsorbers, condensers, oil-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units. 40 C.F.R. § 63.111.

- 27. The HON Subpart G, at 40 C.F.R. § 63.113(a), provides that the owner or operator of a Group 1 process vent as defined in the HON Subpart G shall comply with the requirements of paragraph (a)(1), (2), or (3) of this section. The owner or operator who transfers a gas stream that has the characteristics specified in 40 C.F.R. § 63.107(b) through (h) or meets the criteria specified in 40 C.F.R. § 63.107(i) to an off-site location or an on-site location not owned or operated by the owner or operator of the source for disposal shall comply with the requirements of paragraph 40 C.F.R. § 113(i).
- 28. 40 C.F.R. § 63.113(a)(2) requires the owner or operator of a Group 1 process unit to reduce emissions of total organic HAP by 98 weight-percent or to a concentration of 20 ppm by volume, whichever is less stringent.
- 29. 40 C.F.R. § 63.113(a)(2)(ii) provides that an owner or operator may use a recovery device, alone or in combination with one or more combustion or recapture devices, to reduce emissions of total organic HAP by 98 weight-percent if all conditions of 40 C.F.R. § 63.113(a)(2)(ii)(A) through (a)(2)(ii)(D) are met.
- 30. 40 C.F.R. § 63.113(a)(2)(ii)(A) through (D) requires the following conditions for use of a recovery device to reduce emissions of total organic HAP by 98 weight-percent: (A) the recovery device was installed before the date of proposal of the HON Subpart F that makes the HON Subpart G applicable to process vents in the CMPU; (B) the recovery device that will be used to reduce emissions of total organic HAP by 98 weight-percent is the last recovery device before emission to the atmosphere; (C) the recovery device, alone or in combination with one or more combustion or recovery devices, is capable of reducing emissions of total organic HAP by 98 weight-percent, but is not capable of reliably reducing emissions of total organic HAP to a concentration of 20 ppm by volume; and (D) if the owner or operator disposed of the recovered material, the recovery device would comply with the requirements of this the HON Subpart G for recapture devices.
- 31. 40 C.F.R. § 63.114(a) provides that each owner or operator of a process vent that uses a recovery device or recapture device to comply with the requirements of 40 C.F.R. § 63.113(a)(2) shall install monitoring of equipment specified in 40 C.F.R. § 63.114(a)(1), (a)(2), (a)(3), (a)(4), or (a)(5), depending on the type of device used. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.
- 32. 40 C.F.R. § 63.114(a)(5) states that where a recovery device or recapture device is used to comply with the requirements of 40 C.F.R. § 63.114(a)(2), the owner or operator shall utilize the appropriate monitoring device identified in 40 C.F.R. § 63.114(b), (b)(1), (b)(2), or (b)(3).
- 33. 40 C.F.R. § 63.114(b) provides that each owner or operator of a process vent with a Total Resource Effectiveness (TRE) index value greater than 1.0 as specified under 40 C.F.R.

- § 63.113(a)(3) or 63.113(d) of the HON Subpart G that uses one or more recovery devices shall install either an organic monitoring device equipped with a continuous recorder or the monitoring equipment specified in 40 C.F.R. § 63.114(b)(1), (b)(2), or (b)(3) of this section, depending on the type of recovery device used.
- 34. Cumene is listed in Table 9 of the HON Subpart G as an organic HAP subject to the wastewater provisions for process units at new and existing sources.
- 35. 40 C.F.R. § 63.132(a) provides the specific requirements applicable to process wastewater streams located at existing sources. The owner or operator shall comply with the requirements in 40 C.F.R. § 63.132(a)(1) through (a)(3), no later than the applicable dates specified in 40 C.F.R. § 63.100 of the HON Subpart F.
- 36. 40 C.F.R. § 63.132(a)(1) provides that the owner or operator shall determine whether each wastewater stream requires control for Table 9 compounds by complying with the requirements in either 40 C.F.R. § 63.132(a)(1)(i) or (a)(1)(ii), and shall comply with the requirements in 40 C.F.R. § 63.132(a)(1)(iii).
- 37. 40 C.F.R. § 63.132(a)(2) states that for wastewater streams that are Group 1 for Table 9 compounds, the owner or operator shall comply with 40 C.F.R. § 63.132(a)(2)(i) through (a)(2)(iv).
- 38. 40 C.F.R. § 63.132(a)(2)(i) provides that the owner or operator shall comply with the applicable requirements for wastewater tanks, surface impoundments, containers, individual drain systems, and oil/water separators as specified in 40 C.F.R. § 63.133 through § 63.137, except as provided in 40 C.F.R. § 63.132(a)(2)(i)(A) and (a)(2)(i)(B) and 40 C.F.R. § 63.138(a)(3).
- 39. 40 C.F.R. § 63.132(a)(2)(i)(A) provides that the waste management units may be equipped with pressure relief devices that vent directly to the atmosphere provided the pressure relief device is not used for planned or routine venting of emissions. 40 C.F.R. § 63.132(a)(2)(i)(B) provides that the pressure relief device remains in a closed position at all times except when it is necessary for the pressure relief device to open for the purpose of preventing physical damage or permanent deformation of the waste management unit in accordance with good engineering and safety practices.
- 40. 40 C.F.R. § 63.132(c) provides instructions for determining whether a wastewater stream is Group 1 or Group 2 for Table 9 compounds.
- 41. 40 C.F.R. § 63.132(c)(1)(i) provides that a wastewater stream is a Group 1 wastewater stream for Table 9 compounds if the total annual average concentration of Table 9 compounds is greater than or equal to 10,000 ppm by weight at any flow rate.
- 42. An "individual drain system" is defined as the stationary system used to convey wastewater streams or residuals to a waste management unit or to discharge or disposal. The term includes hard-piping, all process drains and junction boxes, together with their associated sewer lines and other junction boxes, manholes, sumps, and lift stations, conveying wastewater streams or residuals. A segregated stormwater sewer system, which is a drain and collection

system designed and operated for the sole purpose of collecting rainfall runoff at a facility, and which is segregated from all other individual drain systems, is excluded from this definition. 40 C.F.R. § 63.111.

- 43. 40 C.F.R. § 63.136(a) provides that for each individual drain system that receives or manages a Group 1 wastewater stream or a residual removed from a Group 1 wastewater stream, the owner or operator shall comply with 40 C.F.R. § 63.136(b), (c), and (d) or (e), (f), and (g).
- 44. 40 C.F.R. § 63.136(b) provides that the owner or operator shall operate and maintain a cover on each opening in the individual drain system. 40 C.F.R. § 63.136(b)(1)(i) provides that the cover shall be maintained in accordance with the requirements specified in 40 C.F.R. § 63.148. 40 C.F.R. § 63.136(b)(1)(ii) provides that the cover and all openings shall be maintained in a closed position at all times that a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream is in the drain system except when it is necessary to use the opening for sampling or removal, or for equipment inspection, maintenance, or repair.
- 45. 40 C.F.R. § 63.136(c) provides that each individual drain system shall be inspected initially, and semi-annually thereafter, for improper work practices and control equipment failures.
- 46. 40 C.F.R. § 63.136(e)(3) provides that each sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visible gaps or cracks in joints, seals, or other emission interfaces.
- 47. 40 C.F.R. § 63.136(f) provides that equipment used to comply with 40 C.F.R. § 63.136(e)(1), (e)(2), and (e)(3) shall be inspected as follows: (1) each drain using a tightly fitting cap or plug shall be visually inspected initially, and semi-annually thereafter, to ensure caps or plugs are in place and that there are no gaps, cracks, or other holes in the cap or plug; (2) each junction box shall be visually inspected initially, and semi-annually thereafter, to ensure that there are no gaps, cracks, or other holes in the cover; and (3) the unburied portion of each sewer line shall be visually inspected initially, and semi-annually thereafter, for indication of cracks or gaps that could result in air emissions.
- 48. 40 C.F.R. § 63.138(b) provides that the owner or operator shall comply with either 40 C.F.R. § 63.138(b)(1) or (b)(2) for the control of Table 9 compounds at new or existing sources.
- 49. 40 C.F.R. § 63.138(b)(2) provides that the owner or operator shall comply with the requirements specified in 40 C.F.R. § 63.138(d), (e), (f), (g), (h), or (i).
- 50. 40 C.F.R. § 63.138(f) states that the owner or operator shall achieve the required mass removal (RMR) of Table 8 compounds at a new source for a wastewater stream that is Group 1 for Table 8 compounds and/or of Table 9 compounds at a new or existing source for a wastewater stream that is Group 1 for Table 9 compounds. For open biological treatment processes compliance shall be determined using the procedures specified in 40 C.F.R. § 63.145(f) of the HON Subpart G.

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- 51. The HON Subpart G, at 40 C.F.R. § 63.149(a), provides that the owner or operator shall comply with the provisions of Table 35 of the HON Subpart G for each item of equipment meeting all the criteria specified in 40 C.F.R. § 63.149(b) through (d) and either 40 C.F.R. § 63.149(e)(1) or (e)(2).
- 52. Table 35 of the HON Subpart G provides that the following item of equipment be controlled according to the specified controls: drain or drain hub, manhole (includes sumps and other points of access to conveyance system), lift station, trench, pipe, oil/water separator, and tank (applies to tanks with capacities of 38 cubic meters or greater).
- 53. Table 35 of the HON Subpart G provides that where a tightly fitting solid cover (TFSC) is required, it shall be maintained with no visible gaps or openings, except during periods of sampling, inspection, or maintenance.
- 54. 40 C.F.R. § 63.143(b) provides that for each biological treatment unit used to comply with 40 C.F.R. § 63.138, the owner or operator shall comply with the monitoring requirements specified in Table 12 of the HON Subpart G.
- 55. 40 C.F.R. § 63.152(c)(2) states that for an owner or operator of a source complying with the provisions of 40 C.F.R. §§ 63.113 through 63.147 for any emission points, Periodic Reports shall include all information specified in 40 C.F.R. §§ 63.117 and 63.118 for process vents, 40 C.F.R. § 63.122 for storage vessels, 40 C.F.R. §§ 63.129 and 63.130 for transfer operations, and 40 C.F.R. § 63.146 for process wastewater, including reports of periods when monitored parameters are outside their established ranges
- 56. 40 C.F.R. § 63.152(c)(2)(i) provides that for each parameter required to be monitored for a control device, the owner or operator shall establish a range of parameter values to ensure that the device is being applied, operated and maintained properly.
- 57. 40 C.F.R. § 63.152(c)(2)(ii) provides that for each excursion, except for excused excursions, the owner or operator shall be deemed to have failed to have applied the control in a manner that achieves the required operating conditions.
- 58. 40 C.F.R. § 63.152(c)(2)(ii)(B)(6) provides that one excused excursion is allowed for each control device or recovery device for the sixth and all subsequent semiannual periods.
- 59. 40 C.F.R. § 63.152(c)(2)(ii)(A) provides that an excursion means any of three cases including when the daily average value of one or more monitored parameters is outside the permitted range.

The HON Subpart H

60. The provisions of the HON Subpart H apply to affected pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, instrumentation systems, and control devices or closed vent systems in organic HAP service 300 hours or more during the calendar year. 40 C.F.R. § 63.160(a).

- 61. 40 C.F.R. § 63.162(c) requires that each piece of equipment in a process unit to which the HON Subpart H applies shall be identified such that it can be distinguished readily from equipment that is not subject to the HON Subpart H. Identification of the equipment does not require physical tagging of the equipment. For example, the equipment may be identified on a plant site plan, in log entries, or by designation of process unit boundaries by some form of weatherproof identification.
- 62. The HON Subpart H provides that when each leak is detected as specified in 40 C.F.R. §§ 63.163 and 63.164; 40 C.F.R. §§ 63.168 and 63.169; and 40 C.F.R. §§ 63.172 through 63.174, the owner or operator must clearly identify the leaking equipment. 40 C.F.R. § 63.162(f)(1).
- 63. 40 C.F.R. § 63.162(g) states that all terms in the HON Subpart H that define a period of time for completion of required tasks (e.g. weekly, monthly, quarterly, annual) refer to the standard calendar periods unless specified otherwise, except as provided in 40 C.F.R. § 63.162(g)(1). The provision states that if the initial compliance date does not coincide with the beginning of the standard calendar period, an owner or operator may elect to utilize a period beginning on the compliance date, or may elect to comply in accordance with the provisions of 40 C.F.R. § 63.162(g)(2) or 63.162(g)(3).
- 64. 40 C.F.R. § 63.162(g)(2) provides that time periods specified in the HON Subpart H for completion of required tasks may be changed by mutual agreement between the owner or operator and the Administrator.
- 65. 40 C.F.R. § 63.162(g)(3)(i) and (ii) provides that if the initial compliance date does not coincide with the beginning of the calendar period, compliance shall be required (1) before the end of the standard calendar period within which the compliance deadline occurs, if there remain at least 3 days for tasks that must be performed weekly, at least 2 weeks for tasks that must be performed monthly, at least 1 month for tasks that must be performed each quarter, or at least 3 months for tasks that must be performed annually; or (2) in all other cases, before the end of the first full standard calendar period after the period within which the initial compliance deadline occurs.
- 66. 40 C.F.R. § 63.162(h) states that in all cases where the provisions of the HON Subpart H require an owner or operator to repair leaks by a specified time after the leak is detected, it is a violation of the HON Subpart H to fail to take action to repair the leaks within the specified time. If action is taken to repair the leaks within the specified time, failure of that action to successfully repair the leak is not a violation of the HON Subpart H. However, if the repairs are unsuccessful, a leak is detected and the owner or operator shall take further action as required by applicable provisions of the HON Subpart H.
- 67. 40 C.F.R. § 63.163(b)(1) states that the owner or operator of an affected process unit shall monitor each pump monthly to detect leaks by the method specified in 40 C.F.R. § 63.180(b) and shall comply with the requirements of 40 C.F.R. § 63.163(a) through (d), except as provided in 40 C.F.R. § 63.162(b) and paragraphs 40 C.F.R. § 63.163(e) through (j).

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- 68. 40 C.F.R. § 63.163(b)(2) provides that the instrument reading, as determined by the method specified in 40 C.F.R. §63.180(b), that defines a leak in each phase of the standard is (i) for Phase I, 10,000 ppm or greater; (ii) for Phase II, 5,000 ppm or greater; (iii) for Phase III, 1,000 ppm for all pumps not handling polymerizing monomers or in food/medical service.
- 69. 40 C.F.R. § 63.163(b)(3) provides that each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected.
- 70. 40 C.F.R. § 63.163(c)(1) provides that when a leak at an affected pump is detected, is shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except for pumps in Phase III to which a 1,000 ppm leak definition applies. Repair is not required unless an instrument reading of 2,000 ppm or greater is detected. 40 C.F.R. § 63.163(c)(3).
- 71. 40 C.F.R. § 63.163(c)(2) provides that a first attempt at repair of a pump leak shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are not limited to, the following practices where practicable: (1) tightening of packing gland nuts, and/or (2) ensuring the seal flush is operating at design pressure and temperature.
- 72. 40 C.F.R. § 63.168(a)(1)(i) provides that for each group of existing process units at existing sources subject to the provisions of the HON Subpart F, the phases of the standard are (A) Phase I, beginning on the compliance date; (B) Phase II, beginning no later than 1 year after the compliance date; and (C) Phase III, beginning no later than 2.5 years after the compliance date.
- 73. 40 C.F.R. § 63.168(a)(1)(ii) provides that for new affected sources, the applicable phases of the standard are (A) after initial start-up, comply with Phase II requirements; and (B) beginning no later than 1 year after initial start-up, comply with Phase III requirements.
- 74. 40 C.F.R. § 63.167(a)(1) and (2) provide that each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve; and that the cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line, or during maintenance or repair.
- 75. 40 C.F.R. § 63.168(b)(1) provides that affected valves shall be monitored to detect leaks by the method specified in 40 C.F.R. § 63.180(b).
- 76. 40 C.F.R. § 63.168(b)(2) provides that the instrument reading that defines a leak at an affected valve in each phase of the standard is (i) for Phase I, 10,000 ppm or greater; (ii) for Phase II, 500 ppm or greater; and (iii) for Phase III, 500 ppm or greater.
- 77. 40 C.F.R. § 63.168(c) provides that in Phases I and II, each valve shall be monitored quarterly.
- 78. 40 C.F.R. § 63.168(d) provides that in Phase III, the owner or operator shall monitor valves in gas service or light liquid service for leaks at the following intervals: (1) at

process units with 2 percent or greater leaking valves, the owner or operator shall monitor each valve once per month, or once per quarter and implement a quality improvement program for valves; (2) at process units with less than 2 percent leaking valves, the owner or operator may elect to monitor each valve once each quarter; (3) at process units with less than 1 percent leaking valves, the owner or operator may elect to monitor each valve once every 2 quarters; and (4) at process units with less than 0.5 percent leaking valves, the owner or operator may elect to monitor each valve once every 4 quarters.

- 79. 40 C.F.R. § 63.168(f)(1) provides that when a leak at an affected valve is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.
- 80. 40 C.F.R. § 63.168(f)(2) provides that a first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
- 81. 40 C.F.R. § 63.168(c)(3) provides that when a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair.
- 82. 40 C.F.R. § 63.174(a) requires that each owner or operator of a process unit subject to the HON Subpart H monitor all connectors in gas/vapor and light liquid service, except as provided in 40 C.F.R. § 63.162(b), and in 40 C.F.R. § 63.174(f) through (h), at the intervals specified in 40 C.F.R. § 63.174(b).
- 83. 40 C.F.R. § 63.174(b) provides that the owner or operator shall monitor for leaks at the interval specified in either 40 C.F.R. § 63.174(b)(1) or (b)(2) and in 40 C.F.R. § 63.174(b)(3).
- 84. 40 C.F.R. § 63.174(b)(1) provides that for each group of existing process units within an existing source, by no later than 12 months after the compliance date, the owner or operator shall monitor all connectors, except as provided in 40 C.F.R. § 63.174(f) through (h).
- 85. 40 C.F.R. § 63.174(b)(2) provides that for new sources, within the first 12 months after initial start-up or by no later, the owner or operator shall monitor all connectors, except as provided in 40 C.F.R. § 63.174(f) through (h).
- 86. 40 C.F.R. § 63.174(b)(3) provides that after conducting the initial survey required in 40 C.F.R. § 63.174(b)(1) or (b)(2), the owner or operator shall perform all subsequent monitoring of connectors at the frequencies specified in 40 C.F.R. § 63.174(b)(3)(i) through (b)(3)(v), except as provided in 40 C.F.R. § 63.174(c)(2).
- 87. 40 C.F.R. § 63.174(b)(3)(i) provides that the owner or operator shall perform subsequent monitoring of connectors once per year, if the percent leaking connectors in the process unit was 0.5 percent or greater during the last required annual or biennial monitoring periods.
- 88. 40 C.F.R. § 63.180(b)(1) provides that monitoring, as required under the HON Subpart H, shall comply with Method 21 of 40 C.F.R. Part 60, Appendix A.

89. 40 C.F.R. § 63.181(b) through (d) requires that the owner or operator shall record information including, among other things: identification numbers and monitoring schedules for all equipment in each process unit subject to the requirements in 40 C.F.R. §§ 63.162 through 63.174; records of inspections; and when a leak is detected, the instrument and the equipment identification number, the date a leak is detected, the date of first attempt to repair the leak, the date of repair of the leak, and the reason for the delay if a leak is not repaired within 15 days after discovery of the leak.

ALTIVIA's Title V Permit

- 90. Section 502(a) of the CAA, 42 U.S.C. § 7661a(a), provides that no source may operate without a Title V permit after the effective date of any approved permit program promulgated under Title V of the Act. EPA first promulgated regulations governing state operating permit programs on July 21, 1992. See 57 Fed. Reg. 32295; 40 C.F.R. Part 70.
- 91. Section 504(a) of the CAA, 42 U.S.C. § 7661c(a), requires that each Title V permit include enforceable emission limitations and standards, a schedule of compliance, and other conditions necessary to assure compliance with applicable requirements.
- 92. EPA approved the State of Ohio Title V operating permit program on August 15, 1995, with an effective date of October 1, 1995. See 60 Fed. Reg. 42045.
- 93. The regulation at 40 C.F.R. § 70.6(b)(1) specifies that all terms and conditions in a permit issued under a Part 70 program, including any provisions designed to limit a source's potential to emit, are enforceable by the U.S. EPA under the Act.
- 94. The regulations governing the Ohio Title V operating permit program are codified at Ohio Administrative Code (OAC) 3745-77.
- 95. The Ohio Environmental Protection Agency issued a Title V Permit, No. P0091333 (Title V Permit), to the Facility on January 01, 2005.
- 96. The Title V Permit at Part II Condition A.VII states that the permittee is subject to the applicable emission limitation(s) and/or control measures, operational restrictions, monitoring and/or record keeping requirements, reporting requirements, testing requirements, and the general and/or other requirements specified in 40 C.F.R. Part 63, Subparts F, G, and H in accordance with 40 C.F.R. Part 63, Subparts F, G, and H (including referenced Table(s) and Appendices), which are incorporated into the Title V Permit as if fully written.
- 97. Under the Terms and Conditions for the Cumene Oxidation Process Unit, at Part III Condition A.II.3, vessel 202-F is listed as a surge control vessel or bottoms receiver tank that is not required to meet the conditions listed in 40 C.F.R. § 63.170.
- 98. Under the Terms and Conditions for the Phenol III Process Emissions Unit, at Part III Condition A.II.5, vessel 4202-F is listed as a surge control vessel or bottoms receiver tank that is not required to the meet the conditions listed in 40 C.F.R. § 63.170.

Findings of Fact

- 99. ALTIVIA owns and operates the Facility at 1019 Haverhill-Ohio Furnace Road, Haverhill, Ohio. ALTIVIA took ownership of the Facility on or about November 6, 2015.
- 100. Pursuant to the terms of an asset purchase agreement entered during bankruptcy proceedings of the Facility's previous owner and operator, Haverhill Chemicals LLC, ALTIVIA assumed, among other things, all liabilities under certain permits, including the Facility's Title V permit.
- 101. Cumene and phenol are organic hazardous air pollutants, as defined in Section 112(b) at 42 U.S.C. § 7412(a)(2).
- 102. The Facility is a petrochemical plant that uses cumene to manufacture phenol as a primary product, as well as alpha-methylstyrene (AMS) and bisphenol A (BPA).
- 103. The Facility is a major source as defined in Section 112(a) of the CAA. Therefore, affected sources at the Facility are subject to the requirements of the HON Subparts F, G, and H. All affected sources at the Facility are grouped as one chemical manufacturing process unit.
- 104. On May 15 through May 18, 2017, EPA conducted an unannounced CAA inspection (Inspection) at the Facility, including comparative leak, detection and repair (LDAR) monitoring and records review. EPA inspectors used flame ionization detectors (FID) to measure concentration of volatile organic compounds (VOC), including phenol and cumene, at LDAR equipment, individual drain systems, and process vents. ALTIVIA used a FID to confirm EPA's readings during the Inspection.
- 105. On June 2, 2017, ALTIVIA provided EPA with the Shutdown, Start-Up, and Malfunction records for the catalytic oxidizer for the 2015, 2016, and 2017 reporting periods (SSM Records).
- and August 28, 2016, in which the catalytic oxidizer used to control the Phenol III unit, malfunctioned due to a "high quantity of vapor material from process vents." Of these 12 events, the four events between June 3, 2016, and June 12, 2016, were not reported in the HON Subpart H Report for the January 1 June 31, 2016 reporting period or the July 1 December 31, 2016 reporting period. For the events that were reported, ALTIVIA did not state if an emissions exceedance occurred.
- 107. The SSM Records for 2016 also show five events between August 23 29, 2016, in which the catalytic oxidizer malfunctioned and shutdown due to a loss of air controlling the vent stream valve. The first three events resulted in an excess of the Facility's daily volatile organic compounds (VOC) emissions limit.
- 108. Additionally, the SSM records show that the Facility experienced four power outages in 2016 that resulted in shutdown, bypass of the control device, and release of VOC to the atmosphere.

- 109. ALTIVIA operates two decanters identified as 4202-F and 202-F. During the Inspection, ALTIVIA staff confirmed that both vessels decant water from cumene-rich process water. The recovered cumene is recycled back to the process to be reused. Therefore, the operation of these two units meet the definition of "recovery device" as an "organic removal device," as described in the HON Subpart G, and are Group 1 Process Vents per the definition given in the HON Subpart G and the criteria set forth at 40 C.F.R. § 63.107(b) through (h).
- 110. During the Inspection, ALTIVIA provided EPA with the HON Subpart G Notification of Compliance Status for the Phenol III Process Unit dated April 10, 2000 (HON Subpart G NCS for Phenol III).
- 111. In the HON Subpart G NCS for Phenol III, ALTIVIA identifies unit 4202-F as a storage vessel.
- 112. On June 2, 2017, ALTIVIA provided EPA with all HON Subpart G Notifications of Compliance. ALTIVIA does not identify unit 202-F in any of the HON Subpart G Notifications of Compliance Status.
- 113. Organic removal device 202-F recovers cumene for the Phenol II unit, which was operating during the Inspection.
- 114. Organic removal device 4202-F recovers cumene for the Phenol III unit, which was not operating during the Inspection.
- 115. Both 4202-F and 202-F vent to the atmosphere uncontrolled. EPA monitored the vacuum breaker and gooseneck vent at 202-F, and took instrument readings of 1,100 ppm and greater than 50,000 ppm, respectively.
- 116. During the Inspection, ALTIVIA provided EPA with the HON Subpart G Notification of Compliance Status for Equipment Affected by April 22, 1999 Compliance Date (1999 HON Subpart G NCS) dated September 17, 1999.
- 117. In the 1999 HON Subpart G NCS, ALTIVIA states that it owns and operates an open biological treatment process unit to control Group 1 wastewater streams.
- 118. In the 1999 HON Subpart G NCS, ALTIVIA elected to follow the "Required Mass Removal option" at its open biological treatment process to comply with the provisions for process wastewater treatment in the HON Subpart G at 40 C.F.R. § 63.138(f).
- 119. In order to comply with the requirements for wastewater treatment under the HON Subpart G, the Facility established a daily average chemical oxygen demand (COD) range of less than or equal to 200 ppm.
- 120. During the Inspection, ALTIVIA provided EPA with semi-annual reports required under the HON for the 2012 2015 reporting periods.

121. In Semi-Annual reports required by the HON for 2012 - 2015 reporting periods, ALTIVIA reported days in which the biological treatment unit's COD exceeded the established range. The frequency of these excursions are shown in Table 1:

Table 1. Reporting of Excursions at the Biological Treatment Unit for Wastewater that includes Group 1 Wastewater

| Reporting Period | Days with Average COD > 200 ppm | Number of Excursions in Violation of the HON Subpart G |
|-----------------------------|------------------------------------|---|
| March 2013 – September 2013 | 3 | 2 |
| September 2013 – March 2014 | 9 | 8 |
| March 2014 – September 2014 | 16 | 15 |
| September 2014 - March 2015 | 104 | 103 |
| March 2015 - September 2015 | 62 | 61 |

- 122. In the 1999 HON Subpart G NCS, ALTIVIA states that the "Cumene Hydroperoxide (CHP)" and "Phenol" hub systems at the Facility are part of a "liquid stream in an open system," and are comprised of a number of drains, underground piping, piping in trenches with covers, and drain vessels for the collection of fluids. The CHP and Phenol hub systems have been fitted with TFSC.
- 123. In the 1999 HON Subpart G NCS, ALTIVIA also states that "based on engineering judgement, it is assumed that the [Phenol I and Phenol II CHP Hubs'] cumene concentrations are in excess of 10,000 ppm. Therefore, at any flowrate, the hub system will be affected by the HON Rule."
- 124. In the 1999 HON Subpart G NCS, ALTIVIA also states that the Phenol Hub in Phenol II operates with an average concentration of Table 9 organics of 106,000 ppm.
- 125. ALTIVIA's wastewater streams meet the criteria for Group 1 wastewater streams given in 40 C.F.R. § 63.132(c)(1)(i). ALTIVIA's individual drain systems and CHP and Phenol Hubs manage Group 1 wastewater streams.
- During the Inspection, EPA took instrument readings at individual drain systems, drain hubs, trenches, and sample point drains associated with the Facility's drain systems that manage Group 1 wastewater streams. ALTIVIA elected to control drain hubs using tightly-fitting solid covers (TFSC), as required by Table 35, 40 C.F.R. § 63.136, and 40 C.F.R. § 63.149 of the HON Subpart G. ALTIVIA confirmed that they do not monitor TFSC at drain hubs. EPA's instrument readings from the Inspection are detailed in Table 2:

Table 2. EPA Monitoring of ALTIVIA's Process Water Individual Drain and Hub Systems during the Inspection

| Location | • • | | Instrument |
|------------------|---|-----------------|-----------------|
| | | (if applicable) | Reading(ppm) |
| CHP 1 Hub | 2.5" holes in drain cover of trench | | > 500 |
| 201 DA | Concrete lined trench | | > 10,000 |
| 201 DA 201 DD | | | |
| | ½ - 1" of standing water Bottom trench off | | 1,400 3,800 |
| 201 DD | ! | | 3,800 |
| | oxidation reactor; drains to CHP Hub | | |
| 201 DD | Drain hub off oxidation reactor | | . 550 |
| Cumene | Actively draining to line | Sample Point A | 1,800 |
| Oxidation | to CHP Hub; open pipe | • | ĺ |
| Cumene | Instrument valve at | FC3 | 1,900 |
| Oxidation | CHP line; uncapped | | , |
| Cumene | Sample point drain with | | |
| Oxidation | no capture system; next | 1 | |
| | to FC3 valve | | |
| 201 DA | Drain with cover; hard | | 10,200 |
| | pipe off 201 DA | | , |
| 201 DA | Drain without cover; | | 12,000 |
| | static wastewater with | ' | , |
| | no gravity feed | , | |
| 201 DB | Drain in Cumene | | 5,000 |
| | Oxidation | | · |
| Cumene | Drain near valve, | - | 570 |
| Oxidation | COX0465 | | |
| Phenol II | Valve open at sample | 23482 | 1,180 |
| | vessel drain | | |
| Phenol II | TFSC next to 3227E | 23 | 7,200 |
| FC 308 | Trench; measurement | | 1,100; ALTIVIA |
| Reflux | taken 2' above 1" liquid | . | staff, 600 |
| (3203E) | levels | | |
| CHP Hub | TFSC on drain hub | 12 | 18,000; ALTIVIA |
| Phenol II | | | staff, > 10,000 |
| CHP Hub | TFSC on drain hub | 11 | 5,600 |
| Phenol II | | | |
| CHP Hub | TFSC on drain hub | 10 | 4,800 |
| Phenol II | | | · |
| Phenol II | TFSC on drain hub; | 8 | 13,800 |
| | Partly open | | |
| Phenol II | TFSC on drain hub | 29 | 3,800 |

| Near 3208J in Phenol II | TFSC on drain hub | 7 | 19,000 |
|----------------------------|-------------------------|-------------------|----------------------|
| Near 3208J | TFSC on drain hub | 6 | 10,700 |
| in Phenol II | 11 00 on didni ndo | Ü | 10,700 |
| Near 3208J | TFSC on drain hub | 5 | 18,000 |
| in Phenol II | | - | 70,000 |
| Near 3210J | TFSC on drain hub | 9 | 6,200 |
| in Phenol II | | | |
| Phenol II | TFSC on drain hub | 15 | 5,000 |
| Near 3301J | TFSC; sample valve | | 1,788 |
| | open | | |
| 3501J in | Sample line and | | 1,550 |
| Phenol II | collection vessel/drain | | |
| Near Valve, | Drain hub | | 4,500 |
| AMS0957 | | | |
| . At | Open drain system | | 700 |
| AMS0989 | · | | |
| 3518J in | Open valve sample | | |
| Phenol II | point; samples taken | | |
| | earlier that day | | |
| Phenol II | Drain hub | HAV34354 | 13,400 |
| Near | Open sample line and | | 945 |
| AMS0827 | vessel/drain | | |
| Phenol II | Drain hub | HAV32683 | 1,291 |
| Near | Drain hub | | 12,000 |
| PH21899 in | | | |
| 3310JA | | | |
| Near | Standing liquid in | | 2,400 |
| PH20714 | sample point vessel | TT 1 TTO 10 10 | 2.000 |
| Phenol II | Drain hub | HAV34348 | 2,200 |
| On Column | Sample line | PH20739 | Visual drip |
| 3302E in | | | |
| Phenol II | Dun's 1-1 | TT 4 3 / 2 CO C 4 | 2.500 |
| At base of | Drain hub | HAV35954 | 3,500 |
| 3302E in | | | |
| Phenol II | Dunia but | · | Do-tio11 |
| 3313JA in Phenol 2 | Drain hub | | Partially open |
| Near | Pit | | 1,800 |
| PH20632 in | LIL | | 1,000 |
| 3305J | • | | |
| 3305J in | Sample point | | Visual drip; 10,200 |
| Phenol II | Sample home | | v 15uai utip, 10,200 |
| 3302JA in | Drain hub | | Partially open |
| Phenol II | Diam nuo | | r artially open |
| 1 Heliol II | <u>l</u> | | |

| At base of column 3301E. | Open sample point valve to drain hub | 8,800 |
|--------------------------|--------------------------------------|-------|
| At base of column 3301E | Drain hub | 950 |

- 127. ALTIVIA operates equipment at the Facility that includes, but is not limited to, pumps, valves, and open ended lines that are intended to operate in organic HAP service, and are subject to the requirements of the HON Subparts F and H.
- 128. On June 6, 2016, ALTIVIA provided EPA with the Facility's leak, detection, and repair database for equipment monitored at the Facility since at least May 2012 (LDAR database). The LDAR database includes monitoring data for compliance with the requirements of 40 C.F.R. § 63.181.
- 129. From 2012 to the present, ALTIVIA reported a leak rate less than 0.5 percent. Under 40 C.F.R. § 63.168(d)(4), the Facility elected to monitor valves only once every four quarters.
- 130. During the Inspection, EPA conducted comparative LDAR monitoring per EPA Reference Method 21. EPA detected 18 leaking valves out of 805 inspected valves, a 2.2 percent leak rate.
- 131. During the Inspection, ALTIVIA staff confirmed EPA inspector's detected leaks by either visual review of EPA's equipment when the measurement was taken or by taking a confirmation reading with ALTIVIA's FID.
 - 132. Table 3 shows EPA's comparative monitoring results from the Inspection:

Table 3. Valve Leak Summary from EPA Comparative Monitoring during the Inspection

| Valve ID | EPA | ALTIVIA |
|----------|--------------|-------------------------|
| | Reading(ppm) | Reading(ppm) |
| COX0465 | 4,700 | Second EPA reading - |
| | | 2,500 |
| COX1240 | 570 | ALTIVIA staff confirmed |
| ! | | the leak |
| COX0492 | 1,080 | 750 |
| | | |
| COX0494 | 10,200 | 11,000 |
| | | |
| COX0498 | 990 | 900 |
| | | 700 |
| COX1742 | 750 | 800 |
| | | |
| | <u> </u> | <u> </u> |

| PH20202 | 3,000 | Not seated properly |
|---------|--------|--|
| PH20097 | 7,000 | 2,500 |
| PH21224 | 10,200 | 2,000 |
| PH20129 | 8,000 | Visible leak; ALTIVIA staff elected not to monitor |
| PH20119 | 1,000 | 2,000 |
| COX0170 | 4,300 | 800 |
| PH20564 | 682 | ALTIVIA staff confirmed the leak |
| PH20563 | 6,100 | ALTIVIA staff confirmed the leak |
| PH20916 | 650 | ALTIVIA staff confirmed the leak |
| PH20679 | 1,643 | ALTIVIA staff confirmed the leak |
| PH20707 | 3,700 | > 2,000 |
| AMS0591 | 1,400 | ALTIVIA staff confirmed the leak |

- 133. During the Inspection, EPA observed 6 pieces of equipment less than 5 feet above the platform at Column 201-E marked as difficult-to-monitor (DTM) and identified as COX0283, COX0284, COX0286, COX0287, COX0290, and COX029. The LDAR database classified COX0284, COX0286, and COX0291 as DTM. Equipment identified as COX0283, COX0287, and COX0290 could not be found in the LDAR Database.
- 134. The LDAR database shows that COX0284, COX0286, and COX0291 have not been monitored since September 23, 2013. ALTIVIA staff did not monitor these pieces of equipment at the Cumene Oxidation area in 2015 and 2016.
- 135. During the Inspection, EPA observed 33 untagged pieces of equipment. The details of the untagged equipment are identified in Table 4:

Table 4. Untagged Equipment Noted during the Inspection

| Location | Component Type | Description |
|----------|-------------------|-------------|
| In 3503J | Connector | Missing tag |
| PH20182 | Valve | Missing tag |

| PH20351 | Valve | Missing tag |
|--------------------|-----------------------|--------------|
| 3501J in Phenol II | Valve at sample point | Missing tag |
| Near AMS0954 | 11 Valves | Missing tags |
| Near 3503J | 17 Valves | Missing tags |
| Near AMS1042 | Valve at sample point | Missing tag |

136. The LDAR database shows that ALTIVIA staff did not make a practicable or proper first attempt at repairing 17 leaks at pumps and one valve. The LDAR database shows seal washing to be used by the Facility as the first attempt at repair, which is not a proper repair option. The details of the repairs are in Table 5:

Table 5. Leak Repair Summary from ALTIVIA's LDAR Database

| Component ID | Component Type | 1 st Attempt Repair Type | 1 st Attempt Repair Reading (ppm) | Total Days from Identification to Final Repair | Year |
|-----------------|-------------------|---|--|--|------|
| 43065 | Pump | Wash Seal | 1,500 | 15 | 2014 |
| 43065 | Pump | Wash Seal | 0 | 2 | 2015 |
| 10257 | Pump | Wash Seal | 1,079 | 13 | 2014 |
| 2210 | Pump | Wash Seal | 1,200 | 14 | 2014 |
| 2210 | Pump | Wash Seal | 2,000 | 6 | 2017 |
| 2210 | Pump | Wash Seal | | 14 | 2017 |
| 7805 | Pump | Wash Seal | 1,215 | 12 | 2015 |
| 7518 | Pump | Wash Seal | 8 | No record of repair | 2014 |
| 7518 | Pump | Wash Seal | 6,500 | 7 | 2015 |
| 7360 | Pump | Wash Seal | 1,700 | 9 | 2016 |

| 8084 | Pump | Wash Seal and Switch Pump | 3,000 | 13 | 2017 |
|------|-------|---------------------------------|-------|-----|------|
| 7349 | Pump | Wash Seal | 2,500 | 14 | 2016 |
| 7349 | Pump | Wash Seal | 2,000 | . 4 | 2016 |
| 6472 | Pump | None | | 37 | 2015 |
| 5560 | Pump | Wash Seal | 1,500 | 240 | 2014 |
| 5560 | Pump | Wash Seal | 5,000 | 180 | 2015 |
| 7461 | Valve | Tighten Packing Gland | 2,700 | 18 | 2016 |

137. During the Inspection, EPA observed several open ended lines (OELs) without caps and improperly sealed. A list of OELs observed by EPA is in Table 6:

Table 6. Unsealed Open Ended Lines from the Inspection

| Location | Description | Component ID | Instrument Reading(ppm) |
|---------------------|--|--------------|---------------------------------------|
| Cumene Oxidation | CHP; OEL near COX1610 | | 1,610 |
| Cumene Oxidation | CHP; pressure release valve at top of oxidation unit | COX1608 | |
| Cumene Oxidation | OEL off COX0258 | | |
| Cumene Oxidation | OEL at COX1041 | | |
| Cumene Oxidation | OEL off COX1037 area | | |
| Cumene Oxidation | OEL off COX1047 area | | |
| Cumene Oxidation | OEL at 1410 valve; Cumene line | | · · · · · · · · · · · · · · · · · · · |
| Cumene Oxidation | OEL at instrument valve, FC3 | | |
| Cumene Oxidation | OEL | COX1619 | 100 |
| Cumene Oxidation | OEL | COX1617 | |

| Cumene | OEL | COX1616 | |
|------------------|-----------------------------------|-------------|---------------------------------------|
| Oxidation Cumene | OEL | COX1614 | |
| Oxidation | OLL | COMIDIA | |
| Cumene | OEL | COX1613 | |
| Oxidation | OLL | COXIOIS | , |
| Cumene | OEL | COX1611 | · · · · · · · · · · · · · · · · · · · |
| Oxidation | OBL | COXIOII | |
| Cumene | OEL | COX1610 | |
| Oxidation | OLL | COMITO | |
| Cumene | OEL | COX1608 | |
| Oxidation | OLL | COMIOO | |
| Cumene | OEL | COX1605 | |
| Oxidation | OBE | 00711003 | |
| Cumene | OEL | COX1607 | |
| Oxidation | , 522 | | |
| Cumene | OEL | COX1038 | |
| Oxidation | | | |
| Cumene | OEL | COX1602 | |
| Oxidation | | | |
| Cumene | OEL | COX1604 | |
| Oxidation | | | |
| Cumene | OEL | COX1176 | |
| Oxidation | | | |
| Phenol II | OEL; residual liquid on outside | 3682 | 700 |
| ! | - | | |
| Phenol II | OEL; FT517 Stripping | 23165 | 85 |
| Phenol II | OEL; Visual Leak; FT517 Stripping | 23166 | 870 |
| | - " | | |
| | | | |
| Phenol II | At valve PH20202; active drip, | | 3,000 |
| | valve won't seat properly | | |
| | | | |
| | | | |
| Phenol II | Plug at valve, PH20693 | · | 16,000 |
| Phenol II | Loose plug at valve, PH22691 | 4 | 629 |
| | | | |
| Cumene | OEL | COX345 | TT: 11 1 100 |
| | Valve 282 and OEL, work order | | Visual leak; 480 |
| | closed but dripping | | |
| Near Tag | OEL and missing tag | | } |
| 1378 | <u> </u> | | |

- 138. During the Inspection, ALTIVIA provided EPA with semi-annual reports required under the HON Subpart H for the 2015 2016 reporting periods (HON Subpart H Semi-Annual Reports).
- 139. In the HON Subpart H Semi-Annual Reports, ALTIVA cites that it monitors affected connectors once per year in accordance with the frequency specified at 40 C.F.R. § 63.174(b)(3)(i). The LDAR Database shows missed monitoring at affected connectors from 2014 to 2016, as detailed in Table 7:

Table 7. Recorded Monitoring Summary of Monitoring at Connectors in Gas/Vapor and Light Liquid Service from LDAR Database

| Year | Monitoring Events | Connectors in Service | Missed Monitoring |
|------|----------------------|--------------------------|----------------------|
| 2014 | 4,078 | 4,278 | 200 |
| 2015 | 753 | 4,195 | 3,442 |
| 2016 | 2,263 | 4,195 | 1,932 |

Violations

- 140. ALTIVIA has failed to meet Part II Condition A.VII of its Title V Permit requiring compliance with the HON.
- 141. ALTIVIA has failed to implement measures consistent with good air pollution control practices to prevent or minimize excess emissions during malfunctions, in violation of 40 C.F.R. § 63.102(a)(4).
- 142. ALTIVIA failed to determine that the recovery device identified as 202-F is a process vent subject to the HON, in violation of 40 C.F.R. § 63.107(a).
- 143. ALTIVIA failed to determine that the recovery device identified as 4202-F is a process vent subject to the HON, in violation of 40 C.F.R. § 63.107(a).
- 144. ALTIVIA failed to reduce emissions of total organic HAP by 98 weight-percent or to a concentration of 20 ppm by volume from organic recovery devices 202-F, in violation of 40 C.F.R. § 63.113(a)(2).
- 145. ALTIVIA failed to reduce emissions of total organic HAP by 98 weight-percent or to a concentration of 20 ppm by volume from organic recovery device 4202-F, in violation of 40 C.F.R. § 63.113(a)(2).
- 146. ALTIVIA failed to control Group 1 wastewater streams for Table 9 compounds at its open biological wastewater treatment unit, in violation of 40 C.F.R. § 63.138(b)(2) and 63.138(f), as shown in Table 1.

- 147. ALTIVIA failed to determine controls for the CHP and Phenol individual drain systems managing Group 1 wastewater streams, in violation of 40 C.F.R. § 63.132(a)(1).
- 148. ALTIVIA failed to control emissions from the CHP and Phenol individual drain systems, in violation of 40 C.F.R. § 63.136(a), as shown in Table 2.
- 149. ALTIVIA failed to control emissions from liquid streams in the CHP and Phenol open systems, in violation of 40 C.F.R. § 63.149 and 40 C.F.R. Part 63, Subpart G Table 35.
- 150. ALTIVIA failed to conduct inspection events required for individual drain systems, in violation of 40 C.F.R. § 63.136(c) or § 63.136(f).
- 151. ALTIVIA failed to identify equipment subject to the requirements of the HON Subpart H such that it can be distinguished readily from equipment that is not subject to the HON Subpart H, in violation of 40 C.F.R. § 63.162(c), as shown in Table 4.
- 152. Based on EPA's leak rate, ALTIVIA failed to follow EPA Reference Method 21. Specifically, ALTIVIA failed to sample the valve interface where the leakage is indicated until the maximum meter reading is obtained, as required by 40 C.F.R. Part 60, Appendix A, Method 21, § 8.3.1. This is a violation of the requirements at 40 C.F.R. § 63.180(b).
- 153. ALTIVIA failed to monitor each valve in gas/vapor service or light liquid service in accordance with the appropriate schedule, in violation of the standards at 40 C.F.R. § 63.168(d).
- 154. ALTIVIA failed to make a proper first attempt at repair at each leaking pump within 5 days, in violation of 40 C.F.R. § 63.163(c)(2), as shown in Table 5.
- 155. ALTIVIA failed to control emissions from OELs, in violation of the standards at 40 C.F.R. § 63.167(a), as shown in Table 6.
- 156. ALTIVIA failed to monitor each connector in gas/vapor and light liquid service once per year, in violation of 40 C.F.R. § 63.174(a), as shown in Table 7.

Environmental Impacts

- 157. HAP emissions increase the amount of pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, and/or adverse environmental effects.
- 158. Acute inhalation or dermal exposures to phenol is highly irritating to the skin, eyes, and mucous membranes in humans. Chronic exposure to phenol can cause anorexia, progressive weight loss, vertigo, salivation, gastrointestinal irritation, and blood and liver effects in humans.

| 159. | Acute inhalation exposure to cumene may cause headaches, dizzi | ness, |
|-------------|--|-------|
| drowsiness, | slight incoordination, and unconsciousness in humans. | |
| | | |

<u>9/19/17</u> Date

Edward Nam

Director

Air and Radiation Division

CERTIFICATE OF MAILING

I certify that I sent a Finding of Violation, No. EPA-5-17-OH-15, by Certified Mail, Return Receipt Requested, to:

Timothy Albert, Plant Manager ALTIVIA Petrochemicals, LLC 1019 Haverhill-Ohio Furnace Road Haverhill, Ohio 45636

I also certify that I sent copies of the Finding of Violation by first-class mail to:

Jason Patrick, Environmental Health and Safety Manager ALTIVIA Petrochemicals, LLC 1019 Haverhill-Ohio Furnace Road Haverhill, Ohio 45636

James Delabar, Engineering Technology Manager ALTIVIA Petrochemicals, LLC 1019 Haverhill-Ohio Furnace Road Haverhill, Ohio 45636

Cindy Charles, Director Portsmouth City Health Department Air Division 605 Washington Street, 3rd Floor Portsmouth, Ohio 45662

Robert Hodanbosi, Air Pollution Control Division Chief Ohio Environmental Protection Agency – DAPC 50 W Town Street, Suite 700 Columbus, Ohio 43215

On the 20th day of September 2017

Kathy Jones

Program Technician

AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: 70

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